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Gea spinipes C. L. KOCH, 1843 (Araneae: Araneidae), a New Addition to Taiwan Fauna

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Abstract An araneid species, *Gea spinipes* C. L. KOCH, 1843, is reported from Taiwan. The description and illustration are provided. The genus, *Gea* C. L. KOCH, 1843, is also new to Taiwan fauna.

Introduction

Gea spinipes C. L. KOCH, 1843, that had been known from Indochina to India, Indonesia and Borneo (LEVI, 1983), recently recongnized from south Taiwan. The present article also provides its description and illustrations with biological notes.

In previous papers (CHU & OKUMA, 1974; YOSHIDA, 1978), the subfamily Argiopinae of Taiwan comprised only one genus, *Argiope* AUDOUIN, 1826. In the present article, we add the second genus, *Gea* C. L. KOCH, to Argiopinae of Taiwan for the first time.

Gea spinipes C. L. KOCH, 1843

(Figs. 1-4)

Gea spinipes C. L. KOCH, 1843, p. 101, pl. 823; LEVI, 1983, pp. 326, 328, figs. 362-375.
Pronous chelifer HASSELT, 1882, p. 24, pl. 2, fig. 3, pl. 4, figs. 7-10.
Gea decorata THORELL, 1890, p. 104; ROEWER, 1942, p. 745; BONNET, 1957, p. 1982.
Gea festiva THORELL, 1895, p. 166; ROEWER, 1942, p. 745; BONNET, 1957, p. 1982.
Gea festiva nigrifrons SIMON, 1901, p. 59.

Descriptions[based on 1 ♀ (NSYSUB-00216) and 1 ♂ (NSYSUB-00215) from Nanjenshan]. Measurements (♀/♂; in mm). Body length 5.80/4.39. Carapace length 2.74/2.30, width 2.10/1.99. Eyes size: AME=0.16/0.17, ALE=0.10/0.09, PME=0.16/0.14, PLE=0.19/0.14. Distances between eyes: AME-ALE=0.24/0.19, PME-PLE=0.58/0.36, ALE and PLE almost contiguous, MOA anterior width 0.37/0.33, posterior width 0.48/0.39, length 0.60/0.37. Labium length 0.30/0.19, width 0.51/0.20. Sternum length 1.07/1.07, width 1.30/1.15. Abdomen length 3.81/2.40, width 3.32/1.79. Length of legs as shown in Table 1.

Carapace slightly longer than wide, smooth, without hairs; head narrow. ALE smallest, other eyes subequal; ALE cannot be seen from above; posterior eye row

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Table 1. Measurements of legs of *Gea spinipes* C. L. KOCH, 1843 (♀/♂; in mm).

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	2.76/2.72	1.12/0.94	2.04/1.79	2.45/2.38	1.07/1.20	9.44/9.03
II	2.70/2.64	1.09/0.85	1.88/1.62	2.45/2.13	1.02/1.11	9.14/8.35
III	1.89/1.62	0.82/0.51	1.02/1.45	1.12/1.28	0.88/0.77	5.73/5.63
IV	2.86/2.45	1.02/0.77	1.78/1.38	2.24/1.99	0.86/0.92	8.76/7.51

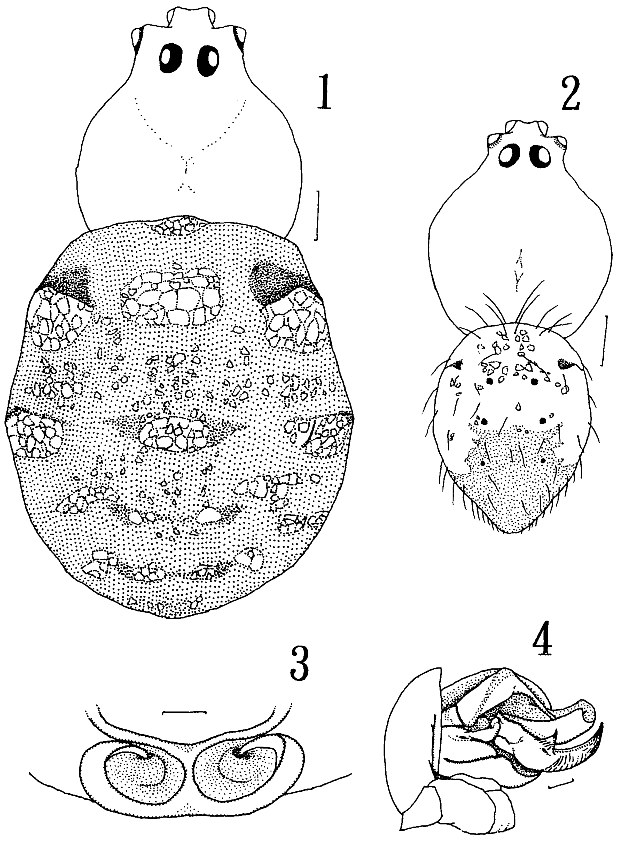

Fig. 1-4. *Gea spinipes* C. L. KOCH, 1843. —— 1. Female, dorsal view. 2. Male, dorsal view. 3. Epigynum, ventral view. 4. Male palp, mesal view. (Scale lines: 1-2, 0.5 mm; 3-4, 0.1 mm.)

strongly procurved, the space between posterior eyes almost equal. Chelicerae with 4 promarginal teeth, and 2 retromarginal teeth. Leg formula I-II-IV-III; tarsi of legs with 3 claws; tarsi of female pedipalp with 1 claw. Abdomen shield-shaped with a pair of hump on anterior part. Epigynum's side completely fill the depression and curl within it (Fig. 3). Male palpi has a longer, enormous and projecting median apophysis (Fig. 4).

Coloration and markings. Female: Carapace, chelicerae reddish brown. Labium, maxillae brown with pale yellow on marginal area. Sternum reddish brown with whitish yellow patch. Legs reddish brown with dark bands. Dorsum of abdomen brown with scattered white pigment spots. Venter with white pigment spots in two rows. Male: Same with female, but dorsum of abdomen with dark brown folium on posterior part.

Specimens examined. 1 ♀, Nanjenshan, Pingtung County, 21-IX-1996, Y.-H. CHANG leg. (NSYSUB-00101); 1 ♀, Nanjenshan, Pingtung County, 19-X-1996, Y.-H. CHANG leg. (NSYSUB-00121); 1 ♀, Wutai, Pingtung County, 31-X-1996, Y.-H. CHANG leg. (NSYSUB-00132); 2 ♀, Lianshan, Pingtung County, 5-XI-1996, Y.-H. CHANG leg. (NSYSUB-00146, 00147); 1 ♂ 1 ♀, Nanjenshan, Pingtung County, 23-XII-1996, Y.-H. CHANG leg. (NSYSUB-00215, 00216); 1 ♀, Taiwu, Pingtung County, 16-II-1997, Y.-H. CHANG leg. (NSYSUB-00239).

Distribution. Taiwan; China (Yunnan); Singapore; Malaysia; Indonesia; Vietnam; Burma; India.

Biology. The web is built close to the ground in low vegetation. When disturbed the spider drops from its web and the light areas of abdomen darken suddenly. The egg sac is star-shaped, thicker in the center, and tapering to the edges.

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